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The University of North Carolina

RECORD

CONTAINING

Suggestions for Teachers

PUBLISHED BY THE UNIVERSITY

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AT CHAPEL HILL, N. C.

NOVEMBER, 1906 NUMBER 47

The University of North Carolina

THE RECORD

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REQUIREMENTS FOR ADMISSION.

Candidates are received by examination or by certificate. Entrance examinations are held in September at the University. Arrangements have been made with certain schools in the State whereby examinations for admission may be held in May, at the schools. The University will accept the uniform entrance examination papers of the Association of Colleges and Preparatory Schools of the Southern States, provided such papers are properly vouched for and sent sealed to the University for grading. Candidates for admission by examination must report at 9 A. M., *Monday*, *Tuesday*, *Wednesday*, *September 9-11, 1907*, to the Registrar, who will appoint time and place for examination.

Students who present certificates of work accomplished at preparatory schools and colleges may be admitted without examination, provided the certificates are approved. The right to examine, however, is reserved, when such a course is deemed necessary. Certificates must be made out on the printed forms furnished on application to the Registrar. They must be submitted for approval to the Committee on Entrance Certificates in No. 10 Alumni Building during the period of registration (*September 9, 10, 11, 1907,*) and then deposited with the Registrar before the work can be officially credited. Whenever possible these certificates should be filed with the President of the University before the first of September,

Subjects Accepted for Entrance.

All candidates for admission into the Freshman Class must offer preparation in Mathematics, in English, in History, and in the subjects designated in one of the following groups:

Group 1.	Group 2.	Group 3.
Latin	Latin or Greek	French
Greek	French or German	German
	Physics	Physics

When applicants have had no preparation in Greek or in French or in German or in Physics, the requirement may be satisfied by pursuing the corresponding course or courses in College. But these studies will not then be counted as any part of the requirement for the bachelor's degree.

Each subject to be offered for entrance has a valuation by points according to the following table:

GREEK:	Grammar	1½ points
	Xenophon	1 point
	Prose Composition	½ point
LATIN:	Caesar and Grammar	1 point
	Cicero	1 point
	Vergil	1½ points
	Prose Composition	½ point
ENGLISH:	Grammar and Rhetoric	1 point
	Literature	2 points
HISTORY:	American	1 point
	English	1 point
	Greek and Roman	1 point
MATHEMATICS:	Arithmetic	1 point
	Algebra	2 points
	Geometry	1 point
GERMAN:	Grammar and Prose Composition	1 point
	Translation	1 point

French:	Grammar	1 point
	Translation	1 point
Physics:		2 points

For unconditioned entrance to the several groups the following total number of points is required:

Group 1	16 points
Group 2	17 points (16 if Greek is taken).
Group 3	15 points.

A student who fails to secure full credit in any subjects required for admission may be admitted with conditions in those subjects, provided he shall have to his credit more than two-thirds of the total number of points required for entrance in such subjects as are not taught in the University.

Such conditions must be removed before the beginning of the Sophomore year. Except in case of failure to pass a student will receive no final mark in the May examination of the Freshman year in the department in which such condition occurs until the condition is removed. Nor will he be admitted to the work of the Sophomore year in any department until all entrance conditions in that department are removed.

The requirements in each of the subjects offered for entrance are as follows:

1. Greek. Three books of Xenophon's Anabasis; acquaintance with the more usual forms and constructions; simple narrative in English, based upon Xenophon's Anabasis, to be translated into Greek.

2. Latin. Two books of Cæsar's Gallic War; four orations of Cicero; six books of Vergil's Aeneid, Latin Grammar, including prosody; simple narrative in English, based upon the prose read, to be translated into Latin.

3. English.* I. Grammar. Elements of Rhetoric.

* These requirements are uniform with those of the leading colleges in the United States.

II. Literature.

(*a*) For reading: Shakspere's The Merchant of Venice and Macbeth; The Sir Roger de Coverley Papers in The Spectator; Irving's Life of Goldsmith; Coleridge's Ancient Mariner; Scott's Ivanhoe and Lady of the Lake; Tennyson's Gareth and Lynette, Lancelot and Elaine, and the Passing of Arthur; Lowell's The Vision of Sir Launfal; George Eliot's Silas Marner.

(*b*) For study and practice: Shakspere's Julius Cæsar; Milton's L'Allegro, Il Penseroso, Comus, and Lycidas; Burke's Speech on Conciliation with America, Macaulay's Essays on Addison and The Life of Johnson.

The candidate is expected to have sufficient knowledge of the books grouped under (*a*) to enable him to answer general questions on their substance. The form of the examination will be the composition of paragraphs on a number of topics connected with the works. The ability of the candidate to express his ideas in clear, accurate English is a main consideration. No applicant should present himself who is notably deficient in spelling, grammar, or paragraphing. Under group (*b*) are enumerated the works that are to be carefully studied. The questions will be upon subject matter and structure.

History. Either of the following courses:

(*a*) The histories of the United States, Greece, and Rome, as outlined in the best text books for high schools.

(*b*) The histories of the United States and England as outlined in the best text books for high schools.

5. Mathematics. A good working knowledge of Arithmetic, including fundamental operations (particularly on common and decimal fractions), compound numbers, percentage, interest and extraction of square root; the whole of a college or academic Algebra to quadratics; the whole of Plane Geometry.

6. German. A thorough knowledge of the inflections, including the most common strong verbs; acquaintance with

the ordinary laws of German syntax; such facility in translation as is gained by a careful study of at least 150 duodecimo pages of ordinary modern German prose; ability to translate into German simple sentences based upon the passages assigned for examination; accurate pronunciation.

7. French. A knowledge of the forms and uses of the various parts of speech, including irregular verbs; translation of about 200 duodecimo pages of French prose into good idiomatic English; translation of simple English sentences into French; accurate pronunciation.

It is recommended that the preparation for the entrance examinations in German and French be extended over two full school years, with four recitation periods a week, so as to allow time for short lessons with dictation exercises, oral practice, and frequent reviews.

8. Physics. The whole of an elementary course such as is contained in Carhart and Chute's High School Physics or its equivalent, embracing the work of at least one session of nine months.

Explanation of Requirements.

Fuller explanation of the the foregoing requirements and examples of entrance conditions, are included in this pamphlet for the information of teachers. Students who are deficient in a small part of a subject are admitted conditionally, provided their preparation is satisfactory in other subjects. These conditions must be removed before the beginning of the Sophomore year. If not so removed, the student may not continue work in the department in which he is conditioned. And work done in that department may not be counted toward his degree until all conditions are removed.

In the hope of aiding the schools and inspiring closer relations between the teachers and the departments of the University, the following statements are printed. They are intended to present essentials of preparatory instruction,

necessary for a proper coordination of the two branches of education. It is hoped, also, that teachers will correspond with members of the faculty of the University in regard to text-books, methods, and any matter about which they may desire information, advice, or other assistance.

Preparation in English.

Each year a majority of the applicants for entrance into Freshman English at the University are conditioned. A large per cent. of these lack the literature requirement only; but many of them are not able to write exercises involving an elementary knowledge of rhetoric. The candidates for admission do not seem to have devoted themselves to English as they have to other branches, more students being conditioned on this study than on the classics and mathematics combined.

The use of clear and correct English is the end to which a preparatory course should be directed. Knowledge of grammar and the science of rhetoric a student may have, and still lack ability to express his ideas in even tolerable language. A graduate of the high school should be able to write simple narrative and description with ease; yet, so far from having this facility of expression, the preparation of a theme is to many students otherwise well prepared a matter of considerable embarrassment, if not an almost impossible task.

The first two years in English at the University are devoted largely to composition. To prepare for this work the student should have constant practice in writing. Formal drill in rhetoric will not remove the natural awkwardness or prevent even the most flagrant errors. The only method of learning English composition is by constantly composing.

The paragraph is the unit of composition and there is no better method of self-discipline in English than the practice of reading a paragraph of good prose and then, with closed book, attempting to reproduce it. Teachers and students

should remember that the main consideration is accuracy in details. If the student learns how to write one page *perfectly*, he is better prepared for Freshman English than if he had brought to college a hundred pages of his own writing correct only in spots. Experience and observation alike prove that if such details as spelling, the use of capitals, of quotation marks, of the possessive sign, indention at the beginning of every paragraph, a regard for the mechanical appearence of the written page, an instinctive feeling for the difference between a whole sentence and a fragmentary sentence, are not learned before coming to college, they rarely become permanent acquisitions afterwards.

Teachers are urged to have their students memorize both prose and verse, and in every case to have them reproduce in writing the memorized selections with scrupulous attention to the details already enumerated. If the practice is kept up of reproducing in written English what has been read or memorized, the student will become almost independent of grammars and rhetorics. He will have learned English where the masters learned it: that is, at first hand.

The requirements in literature embody the joint efforts of the best high schools, colleges, and universities in the United States. They represent also all the more common forms or types of literary art, such as the drama, the lyric, the elegy, the epic, the masque, the oration, the character sketch, the 19th century novel, and the essays, thus giving ample room for parallel reading and for the specialized study of literary types in more advanced courses.

All of the masterpieces required are published in well edited and inexpensive form by The Macmillan Co. (N. Y.), Ginn and Co. (N. Y.), Henry Holt & Co. (N. Y.), and other leading publishing houses. A postal card will bring all necessary information.

EXAMINATION IN ENGLISH.

I. a. Write a page of memorized prose or verse.

b. Classify the verbs in the selection as strong or weak, and give their three principal parts.

II. a. Contrast description and narration.

b. Name from your reading some noted examples of description and narration.

III. a. Compare the main teaching of *The Ancient Mariner* with that of *The Vision of Sir Launfal.*

b. What light is thrown on Addison's character by *The Sir Roger de Coverley Papers?*

c. Name with brief descriptive phrases the leading characters in (1) *The Merchant of Venice*, (2) *Ivanhoe*, and (3) *Silas Marner.*

IV. a. Sketch the life of Milton.

b. Give three of Burke's arguments for conciliation.

V. a. Can you mention any good points in the characters of Lady Macbeth and Shylock?

b. Relate the most amusing incident that you found in Irving's *Life of Goldsmith.*

VI. a. Write a paragragh contrasting *L'Allegro* and *Il Penseroso.*

b. Tell where the following quotations are found, and explain the meaning of each:

(1) "I dare do all that may become a man;
Who dares do more is none."

(2) "There's husbandry in heaven;
Their candles are all out."

(3) "He that has light within his own clear breast
May sit i' th' center and enjoy bright day;
But he that hides a dark soul and foul thoughts
Benighted walks under the midday sun."

(4) "Then to the well-trod stage anon,
If Jonson's learned sock be on,
Or sweetest Shakespeare, Fancy's child,
Warble his native wood-notes wild."

Preparation in Greek.

In most cases a student has studied Latin one or two years before beginning Greek. Either language is a great help to him in the other. Nobody can be a scholar, in the best sense, in either Latin or Greek unless he has studied both.

When a student leaves the preparatory school, he is expected to know the grammatical forms of nouns, adjectives, pronouns, and verbs; the leading principles of syntax; to have acquired a reasonably good vocabulary of Greek words; to be able to read ordinary Greek with some readiness, and to turn simple English sentences into Greek. This is not very much, but one who knows this ought to have little trouble in his further study of Greek.

Two years should be devoted to preparation. A bright student may, however, by using the summer vacation for completing his studies, finish nearly all of his preparatory Greek in one year. If he has not read all of the required three books of the Anabasis, the deficiency may be made good by private study during his Freshman year.

Of the introductory books, Ball's *The Elements of Greek* (Macmillan), Gleason and Atherton's *First Greek Book* (American Book Co.), Benner & Smyth's *Beginner's Greek Book* (American Book Co.), and White's *First Greek Book* (Ginn and Co.), are very good. Any of the books recommended contains everything that teacher and student will need to consider during the first term of the study of Greek.

Babbitt's *Grammar of Attic and Ionic Greek*, and Hadley-Allen's *Greek Grammar*, both published by the American Book Co., are the clearest in statement and arrangement, and best for use. Teachers who prefer to use a reader and a grammar, instead of an introductory book, will find Moss's *First Greek Reader* (Allyn and Bacon), and Colson's *First Greek Reader* (Macmillan) excellent books. Good school editions of the Anabasis are Goodwin and White's (Ginn and

Co.), Harper and Wallace's (American Book Co.), and Kelsey's (Allyn and Bacon).

It is of the greatest importance that the beginner should at once become familiar with the appearance and sounds of Greek words. He should, therefore, have constant practice in pronunciation from the very start. Time will be saved by devoting a large part of the earlier recitations to pronunciation. Most of the supposed difficulty of Greek is due to the learner's uncertainty about the pronuciation of Greek words. Practice will remove this difficulty.

In all things, accuracy should be insisted upon. Frequent reviews are necessary. Everything about a language cannot be taught in connection with any one lesson. A few things should be prepared with special care each day or week. In this way, all of the more important principles can be covered in a short time, and applied to the text read.

The verb is supposed to be hard to learn. Perhaps it is hard. But there is almost no form of the verb that does not bear on its face the signs of what it is and where it is. Students should be taught to observe these signs. Themes, tense suffixes, mood-signs, personal endings, augment, reduplication, etc., ought to be understood perfectly. The student can easily be trained to locate at sight almost any form of the verb.

The introductory books contain enough exercises for preparatory instruction in prose composition. It is a good plan to have the class turn back into Greek the translation which they have made of their reading lesson.

The absolute mastery of a small vocabulary is necessary in any language. Two or three hundred of the commonest words can be selected and committed to memory. Students get into the habit of looking up the meaning of words which they know already. All of the commonest words occur so often that there is no reason for not recognizing them. For example, Xenophon uses more than ten times in the first there books of the Anabasis ninety-four verbs, sixty-two

nouns and twenty-six adjectives,—to say nothing of the pronouns, prepositions, conjunctions and common adverbs. All of these can be thoroughly learned in a few weeks, or in a few years. It is just as easy to learn them in a few weeks, and considerably better. Some practice in reading easy Greek at sight will strengthen the student's vocabulary. The New Testament (Westcott and Hort's edition, Harper and Brothers, or the Macmillan Co.) is excellent for use in sight reading.

Students should be taught to translate each word in the order in which it stands in the Greek sentence. This is essential to progress, and is the natural way to arrive at the true meaning. In recitation, the translation should, of course, be given in the best English.

EXAMINATION IN GREEK.

I. Translate Book I, iv, 14.

II. Translate Book II, iv, 22.

III. Translate Book III, ii, 10.

IV. *a*. Decline στρατιωτῶν, τί, βασιλέα, ὑμᾶς, πόλεις, ἐλπίδες.
b. Inflect μείναιεν, ἐγνώσθη, ἐτύγχανον, ὥσι.
c. Locate forms: προτιμήσεσθε, ποιῆσαι, διαβῆναι, διελόντες, λελύκασιν.
d. Synopsis of παιδεύω.
e. Principal parts of πείθω, βαίνω, τυγχάνω.
f. Explain syntax: πεισθῆτε, στρατιωτῶν, ὑποπέμψαιεν, μείναιεν, βούλοιτο ἐργασομένων, ἐνόντων, βούλωνται.

NOTE. Forms in questions *a–f* will be found successively in passages for translation.

V. Write in Greek:
One of Menon's soldiers said that he had been beaten by Clearchus; therefore, on the same day, when Clearchus was riding by, they threw stones at him. When Cyrus learned of the affair, he rode

between the two armies and told the Greeks that if they fought, they would be cut to pieces.

Preparation in Latin.

The requirements for entrance in Latin are:

1. Grammar—the declensions, conjugations and the more common usages of the cases, moods and tenses.
2. Cæsar—two books.
3. Cicero—four orations.
4. Vergil—six books.
5. Latin composition.

Suggestions to teachers of preparatory Latin may well emphasize features of the work known to be good and may also present others which, it seems, will be fortunate additions to the methods usually followed with beginners. And emphasis should first be given the necessity for an exact and facile knowledge of the declensions and conjugations and the more frequently recurring uses of the cases, moods and tenses. The student may not hope to read the language with ease and quickness of understanding until he is master of the forms and the various meanings which these forms may have. As soon as the word is before the eye, the mind should know the case, mood or tense and all its possible uses. And exactness should be the aim, as well as quickness. In certain studies it would be an error to mistake a brick for a piece of quartz. But it is not less an error to confuse two case forms or two uses of a mood or tense. Exactness in observing forms and facility for determining their meaning are essentials for successful work in Latin. This mastery of the language and this exactness of habit cannot be secured without effort. There is no easy method of learning Latin and there never will be. He alone will be able to read with facility who, in the beginning, has been taught exactly and carefully the forms of the language and their use in syntax. No method which attains that end can be old-fashioned.

Correct habits of pronunciation should be secured with the beginner. If the proper sounds are used in learning the paradigms, if the accent be rightly placed at this time, the habit will be followed. And differences in quantity should also be observed. The long vowels are not the same as or even similar to the short; they are different letters. Hence the teacher should insist that twice as much time be taken for the long as for the short. In reading the hexameter verse also, there can be no success unless the difference between long and short is carefully observed. The Roman method of pronunciation should always be used.

There is another difficulty which should be carefully presented to the beginner. This is the arrangement of words. The Latin is more elastic than the English and admits of greater variety in the position of the elements of the sentence. But the Latin order is rational and presents the thought often in the best possible way. Hence all successful reading must be done in the order of the original. In no other way can it become facile. Let the student understand the sentence as it stands, reading it by its thought units and without transposition or any disarrangement of the order. When all the thoughts are thus understood, they may then be restated in simple English. This method is successfully taught by reading aloud easy sentences, presenting but one thought at a time and allowing the student to see the meaning in the order of the original. And if all the thought is clear to him without the necessity of translation, the method is most highly successful.

It is wise to avoid carrying the beginner into the first book of Cæsar, after the preliminary study is completed. A book of selections may be substituted successfully. Among the best of these may be mentioned Ginn & Co.'s second year Latin, and Allyn & Bacon's Junior Latin book. Each of these books has selections from Cæsar equal to the amount required for entrance. In beginning Cæsar the second book is wisely chosen.

And after the reading of continuous narrative has begun, attention should be given to translation at sight. By this method the student is given greater facility in recognizing the forms, the syntax of words, and finally the meaning of the sentence. The student should also be taught to detect the meaning of a word from its position in the sentence, from association of similarity to an English derivative. This will aid the student to master the small vocabulary necessary to easy reading.

Practice in prose composition should be begun as soon as the simplest principles of grammar have been mastered, and continued throughout the period of preparation. This is the best possible drill in the forms and syntax of a language. It is also a decided aid to the acquiring of a reading vocabulary. Among the best books for the purpose are Collar & Daniell's *Beginner's Latin Book* (Ginn & Co.), Bennett's *Foundations of Latin* (Allen & Bacon) and Abbott's *First Latin Book* (American Book Co.). It is well, too, to have the student put into Latin passages which he has translated into English from Cæsar or from the reading book used in substitution for Cæsar.

Finally the study of Latin should always be associated with the lives of the people who spoke it. Emphasis should be given to history, geography, manners and customs, and, in general, the great contributions made by Rome to civilization.

EXAMINATION IN LATIN.

I. 1. Translate Cæsar, B. G. I, 13 to *Quod improviso.*
2. Explain the construction of *proelio*, *adventu*, *id*, *partem*, *virtutis.*
3. Decline *copias*, *exercitum*, *diebus*, *dux.*
4. Give the principal parts of *traducit*, *transirent*, *persequi.*

II. 1. Translate Cic. Cat. III, *Introductus* to *Vulturcio.*

2. Account for the mood of *cognosceret, vellet, venissent.*
3. What was the purpose of this Oration?

III. 1. Translate Virg. Aen. III, 129—139.
2. What point in the story is reached with these lines?
3. Write out lines 129, 130, divide into feet, indicate the cæsurae, and explain the quanity of each syllable in line 129.

IV. Translate into Latin.

When news of this battle beyond the Rhine was brought, the Suebi, who had come to the banks of the Rhine, began to return home. The Nervi, who live nearest the Rhine, knew that the Suebi were terrified. Pursuing, they killed a great number of the Suebi. After two very important wars had been brought to an end in one summer, Caesar led his army into the country of the Sequani to winter quarters. He put Labienus in command of the winter quarters.

Preparation in Mathematics.

The requirements for admission into the Freshman class in Mathematics are:

(1) A good working knowledge of Arithmetic, including fundamental operations (particularly on common and decimal fractions), compound numbers, percentage, interest, and extraction of square root.

Problems that are much more easily solved by algebra are not included here.

(2) The whole of a high school Algebra and a college Algebra to Quadratics.

(3) The whole of Plane Geometry.

The principal aim in preparing students in these subjects should be to give them facility in those operations constantly

required in the future course, with strict attention to the analysis and logic involved.

In fact, one of the principal objects in a college course in Mathematics is to train the mind to strict, logical methods of thought and absolute precision of statement, and it is very necessary for the student's further progress, that especial emphasis be laid upon these features before entering the University.

Geometry has, for centuries, found a place in college curricula, because of the strict logical form in which it was originally cast, and one aim in writers of the most recent text-books on Algebra is to make it, like Geometry, a course in elementary logic.

Therefore those books only should be used in Algebra which consider, from the start, minus as well as plus quantities and give complete demonstrations of the principle involved. Students whose idea of algebra is limited to finding the value of x in some example or problem, begin to flounder when general demonstrations are met with where numbers are represented entirely by letters.

For text-books, Fisher and Schwatt's Secondary Algebra, Taylor's or Dickson's Algebra, and Wentworth's High School Algebra are mentioned as being particularly serviceable in preparing students for the University.

In Geometry, Wells's or Wentworth's well known books are practical texts. Beman and Smith's Geometry, too, is a scientific book with many excellent features.

As a guide to the instructor, "The Teaching of Elementary Mathematics," by D. E. Smith, is recommended.

The examinations for entrance are sometimes written, at other times oral, and may vary according to the testimonial brought by the student.

The examinations cover the whole ground mentioned, the subjects being changed from time to time, however, particularly if the examination is oral.

As an average examination, the following may suffice as an illustration*.

Examination in Mathematics.

ARITHMETIC.

Simplify $\frac{29}{30} + 5\frac{1}{5} - \frac{37}{18}$, $4\frac{1}{56} \times \frac{28}{9}$, $\frac{73}{42} \div \frac{4}{7}$.

Reduce 0.28062 months to days, hours and minutes; 6383 half-pence to pounds, shillings, pence.

Find to the nearest cent, the compound interest on $1,721 for 3 years at 5 per cent.

Extract the square root of 942,841.

ALGEBRA TO QUADRATICS.

Find the least common multiple of x^3-x, x^2-x-2, x^3+1.

Solve the equation $\frac{6x+7}{15} - \frac{2x-2}{7x-6} = \frac{2x+1}{5}$.

Simplify $\sqrt{a^2b} \times \sqrt[3]{ab^{-3}}$, and $\left(\frac{81}{16}\right)^{\frac{3}{4}}$.

Find the product of $\sqrt{\frac{2}{3}}$ and $\sqrt[3]{\frac{1}{2}}$.

A takes three hours longer than B to walk thirty miles; but if he doubles his pace he takes two hours less time than B; find their rates of walking.

*Compare the Uniform Entrance Examination forms of the Association of Colleges and Preparatory Schools of the Southern States. Committee on Mathematics examination, Cooper D. Schmitt, W. R. Webb, Jr., W. M. Thornton.

PLANE GEOMETRY.

The lines joining the mid-points of the sides of a rectangle, taken in order, inclose a rhombus.

Construct a circle which shall touch two given parallel lines and pass through a given point between them.

Two triangles are similar when their homologous sides are proportional.

Transform a given triangle into an equivalent right triangle, having one leg equal to a given length.

A circle may be inscribed in, or circumscribed about, any regular polygon.

Preparation in History.

The student may prepare on either of the following groups:

a. The histories of the United States, and of Greece and Rome.

b. The histories of the United States, and of England.

It is advisable to prepare on the first rather than the second group. It is necessary that the student have a rather thorough, though elementary, acquaintance with the leading facts and movements in the history of the American people. The political, social, economic, constitutional, military and literary aspects, should all receive consideration. The following text-books are suggested: Johnston's *High School History of the United States*, McLaughlin's *History of the American Nation*, Montgomery's *Student's American History*, Channing's *Student's History of the United States*, or an equivalent. The histories of Greece and Rome should be considered in the same aspects as mentioned above. The following text-books are suggested: Botsford's *History of Greece*, Botsford's *History of Rome*, Botsford's *Ancient History for Beginners*, Myers's *History of Greece*, Myers's *Rome; its Rise and Fall*, West's *Ancient History*, Seignobos's *History of the Roman People*, or an equivalent.

In case the student prefers to prepare on English History in place of Grecian and Roman, he should study the life and development of the English people from the same phases as already suggested. Coman and Kendal's *History of England*, Montgomery's *English History*, or an equivalent will be expected.

Preparation in French and German.

The benefit which pupils ultimately derive from the study of French and German depends largely upon the work of the first teacher. That work should be definite and thorough. It is wise to proceed slowly. The period of preparation may profitably embrace two full school years with at least four recitations per week.

With young people and at the beginning of the study, good results may be obtained from conversational methods, followed later by systematic study of grammer and translation. But unless the teacher speaks the foriegn language fluently, it is unwise to attempt conversation. In any case it will always be possible to give simple oral exercises based, if necessary, upon the exercises in the grammar, and such exercises, no matter how simple, are to be strongly recommended,

Let accurate pronunciation be taught at the beginning and fixeed by constant practice.

The teaching of the gammar should proceed by easy stages, with oral practice, written exercises and frequent reviews. Particular attention ought to be given to the verb. After the various tenses have been learned separately, with a definite meaning for each form, paradigms should be studied as a whole, in order to show the relation of the modes and tenses. The pupil should know all the irregular French verbs, the German strong verbs, and modal auxiliaries. In the case of the subjunctive mode, it will be sufficient to give clearly a few explanations based on a comparison with the indicative mode, showing in general that statements made in the subjunctive,

(except those expressing a wish), lack independence and directness, or actually contain an inference of unreality.

Simple translation may begin after the grammar has been studied two or three months, and then the two should proceed together. In the second year most of the time should be devoted to translation. The grammar may be profitably reviewed by written exercises carefully corrected and explained.

The amount of translation required is at least 200 duodecimo pages of French and 150 duodecimo pages of German prose. Good translation is accurate, idiomatic translation.

The following text-books are suggested:

FRENCH.—One of the best grammars for beginners is Joyne's *Minimum French Grammar* (Holt & Co.). For advanced students Fraser and Squair's *French Grammar* (Holt & Co.) is recommended. The former gives succinct and clear statements of the elements of grammar, with a limited amount of exercises in pronunciation and prose composition, while the latter treats more fully the syntax of the language, besides giving a large amount of matter for written and oral exercises, and an abundant supply of materials for the application of the modern phonetic method of acquiring an accurate pronunciation of French.

For early reading, Chataubriand's *Le Dernier Abencerage* (American Book Co.), an interesting short story, and Feuillet's *Le Jeune Homme Pauvre* (Heath & Co.), an idealistic novel, are suggested.

GERMAN.—German Lessons Collar's *Eysenbach*, (Ginn & Co., Boston), is especially useful for oral practice; Joynes-Meissner's *Grammar*, Part I (D. C. Heath & Co., Boston), and Thomas' *Grammar*, Part I (Henry Holt & Co., N. Y.) give a more extensive treatment; Bierwirth's *Beginning German*, (Henry Holt & Co.) is short but excellent; Ball's *Drill Book* (D. C. Heath & Co.) may be used with other grammars.

Glück Auf (Ginn & Co.) is good for early reading; Hewett's *Reader* (Macmillan & Co.); Harris' *Reader*, Thomas' *Reader* (the last two pudlished by Henry Holt & Co.); *Höher*

Als die Kirche; *Der Zerbrochene Krug*; *Immensee* (the last three published by D. C. Heath & Co.)

Preparation in Physics.

To satisfy the entrance requirement in Physics the student must have completed a good elementary course. If done under a teacher, a certificate of satisfactory attainment must be presented, but if by private study an entrance examination must be passed.

The work of preparation should be carefully done; special attention being given to definitions of physical terms and the correctness of their use. The use of words is not a matter of choice when one is explaining a physical truth or describing a physical event. Accuracy of statement should be made a matter of first importance; it is an aid as well as an exponent of accurate thinking.

Inexpensive or even improvised apparatus may be used to great advantage in illustrating the simpler laws and principles. The knowledge that the student has acquired from observation and experience should be utilized, and he should be shown that the principles and laws of physics are applicable to and include common, every-day occurrences.

The solution of problems will be found very serviceable in fixing the meaning of physical quantities and their relationships and impressing upon the student the use and value of the study.

The text-book used should be of the grade of the following: Carhart and Chute's *High School Physics* (Allyn and Bacon); Gage's *Elements of Physics* (Ginn & Co); or Nichols' *The Outlines of Physics* (The Macmillan Co.)

EXAMINATION IN PHYSICS.

Covering Mechanics of Solids, Liquids and Gases.

Define acceleration. Find the velocity of a particle moving for 5 seconds if it has an acceleration of 32 feet.

What is needed to keep a particle moving with uniform speed in a circle, and why?

State Newton's Laws of Motion, and give an illustration under each.

Define: Force; Momentum; Work; Power; Energy.

What is a Machine? What is meant by the Mechanical Advantage of a machine; the Efficiency of a machine?

Two men lift a uniform heavy beam. One man takes hold of one end and the other at a point one-third the length of beam from the other end. What part of the mass of the beam is each man lifting?

How do liquids transmit applied pressure? Why must the free surface of a liquid at rest be horizontal?

Define Density. A body weighs 12 pounds in air and 8 pounds immersed in water. What is its density relative to water? Explain solution.

Explain the construction and operation of the Suction Pump.

Describe Torricelli's Experiment which shows and measures the pressure of the atmosphere.

WHY SHOULD A YOUNG MAN GO TO COLLEGE?

President Venable of the University of North Carolina Gives Six Reasons in Reply.

From The Progressive Farmer and Cotton Plant of August 9, 1906.

Messrs. Editors: Not every boy is fit to go to college. There is a great selective process which goes on every year. Hundreds of thousands go to the primary schools. Thousands of these prove worthy to go to the secondary schools, and out of these a few hundreds push on through the college course. This means that the very pick of our youth, the most perfect flower of our civilization receive the college training and become the leaders of the people. This is true even though some by reason of native ability painfully acquire their education outside the college and take their place among the leaders.

There are three essentials for a college education: Preparation, Persistence and Pluck. No one having these need despair because of lack of money or for any other reason. And of these three, the most essential are the last two. The poorly prepared boy can make up this deficiency, but the best prepared in the world will not succeed unless he have courage and the power to stick at his task.

Granted that a young man has these three requisites, the question is not why should he go to college but what possible influence should be permitted to prevent his going forward, securing the best available training and taking his place among the trained workers and leaders of the world.

Still some might debate the question, partly because all college men do not succeed and, secondly, many succeed who do not go to college. Two things must be borne in mind.

A college education can not make a wise man out of a fool—it can only make him a more conspicious fool. Education is only one of the elements of success. There are others equally essential. Again, a kind of education can be secured outside of the college but at greatly increased cost of time and labor, and the result is far less satisfactory.

There is something in a college education well worth the striving for. It does not consist merely in the gathering of information or the filling up of the mind with facts. It makes the horizon wider and the life fuller. It gives an entrance into our just heritage of the wisdom of all ages. It diciplines the mind so that perception is quickened, understanding is strengthened and the mental powers are brought under the same sort of control as the bodily powers. Its highest aim is self mastery. Further, it gives the great element of success which comes from mixing with and controlling men. To have these things constitutes that knowlege which is power; to miss them is to lose all that is highest in life.

It is not difficult to give reasons why, if possible, one should get this great gain in life.

1. It increases many fold the possible joy and glory of living.

2. It makes the full perfect man. One may be a fine specimen of physical manhood but if his mind is only partially trained his true manhood is to that extent stunted and dwarfed.

3. It greatly increases the possibilities of usefulness to communtty, country and to God. The fullest development of the individual means the greatest progress of the race.

4. It multiplies the chances of success in life. This is an age of sharp competition. It is also an age of educated men. All possible training is being seized upon to give one a better chance. The untrained man will find it increasingly difficult to make his way. There is no doubt about it that the bright, well trained college graduate has several hundred times a better chance than the boy who depends upon a little simple elementary schooling.

5. It increases the earning capacity and this means increased wealth not only for the individual, which would be unworthily selfish, but for the state and the nation.

6. Every strong and healthy youth of eighteen or twenty has before him some forty or more years of life which he may live as best he may. He has the power to make or to mar that life. Will he deliberately turn from an education now and so cut down his chances and starve those years through which he must live, condemning himself to the lot of the unskilled and untrained? Or will he by unceasing effort secure the necessary training and rise to the worthy place among those whose labors are a blessing to humanity?

GO TO COLLEGE, YOUNG MAN.

Advice to a Hesitating Boy by Editor G. B. Winton, of the Christian Advocate, Nashville, Tenn.

From The Progressive Farmer and Cotton Plant of August 9, 1906.

Go to college, young man.

Others are preparing to go, and you are lingering, undecided. You have completed the high-school course and are making good wages. Your employer does not wish to give you up, and business is enticing. Go, nevertheless. The good is often enemy of the better. You are doing fairly well, and doubtless could continue. For the actual needs of mercantile and even of professional life, the equipment furnished by preparatory studies is fairly adequate. It will probably be years before you begin to feel the grave injury you have done yourself in not continuing your studies. But when the realization does come, it will be a heavier blow than you can now possibly anticipate.

It will be when you have attained the dead level of mediocrity out of which you find it impossible to break. Your labor continues to bring about what it did two or three years after you began work. A family has grown up about you meantime, and the demands upon you are constantly getting heavier. Moreover, old age and helplessness are beginning to rise, ominous spectres, above the horizon of your future. Others are outstripping you on every hand—younger men who, with no more native ability and much less experience, yet leave you behind. You look in vain for the secret. You vex yourself with jealous suspicion: it must be because of favoritism; your merits are not appreciated. But presently the grim truth flashes upon you: these men are educated men.

They have what you lack—the trained intellect, the broad outlook upon life, the versatility that turns from one task to another without confusion or delay; while you must plod along the same beaten path in which too many like you are already crowding each other for room. When a man sees himself in that situation, the result, nine times out of ten, of a "practical" preparation for his life work in the place of a broadening and fertilizing course of study for culture's sake, he would give all that he has or ever will get to go back and begin again. It may not be. The world about us is full of men lamenting their inadequate preparation for life's golden opportunities; few indeed bewail the fact of getting ready too well.

A course in college is not, to be sure, a guarantee of a successful career in life, nor the lack of it of absolute failure. Yet the time has come, in our own land more particularly, when, in view of the ease with which access to college studies may be had, and in view of the number of life's prizes which are within the reach of the thoroughly equipped man, and of him alone, it is scarcely short of suicidal on the part of a young man to fail through mere stupidity and indifference to prepare himself for any contingency. Every employe on a railway should understand that he may be called to the presidency of it; every clerk in a mercantile house, that he may become the head of the firm; every youth that he may be drawn into public life and become a legislator or governor or even president. The college course of study, the result of centuries of experiment and observation, is adapted specifically to the making of men. No boy who wishes to be a man can afford to miss the help it will give him. If you are hesitating—whether from indolence, poverty, business, ignorance or indifference—go to college, young man: you will never regret it.

APPROVED SCHOOLS.

Schools whose courses of study are found sufficient in scope and character to prepare students, in any one or more of the groups of studies outlined on page 4, for unconditioned entrance into the Freshman class, may by applying for accredited relations become Approved Schools. Upon application of principals or superintendents who wish to have their schools approved, proper blanks, etc., will at once be forwarded, and as soon as convenient thereafter their schools will be visited. The list of approved schools, here published for the first time, will hereafter be published annually. There are other schools applying for accredited relations, and as soon as practicable those found to be eligible will be included in this list. Following are the schools that have been approved to date:

Asheville School, Asheville, N. C., C. A. Mitchell, A.B., N. M. Anderson, B.S., Principals.

Atlantic Collegiate Institute, Elizabeth City, N. C., S. L. Sheep, President.

Bingham School, Asheville, N. C., Col. Robert Bingham, A.M., LL.D., Superintendent.

Buie's Creek Academy, Buie's Creek, N. C., Rev. J. A. Campbell, Principal.

City High School, Asheville, N. C., R. W. Mitchell, A.B., Principal.

City High School, Raleigh, N. C., Hugh Morson, Principal.

Collegiate Institute, Mount Pleasant, N. C., Rev. H. A. McCullough, B.D., Principal.

Durham City High School, Durham, N. C., W. G. Brogden, Ph.B., Principal.

Oak Ridge Institute, Oak Ridge, N. C., J. A. and M. H. Holt, Principals.

Raeford Institute, Raeford, N. C., John A. McLeod, A.B., Principal.

Warrenton High School, Warrenton, N. C., John Graham, Principal.

Weaver School, Lenoir, N. C., Anderson Weaver, A.B., Principal.

Whitsett Institute, Whitsett, N. C., W. T. Whitsett, Ph.D., President.

Wilmington High School, Wilmington, N. C., J. B. Huff, A.M., Principal.

There are a number of other schools, doing excellent preparatory work yet not completely satisfying the University's requirements for unconditioned entrance. Students will be accepted from certain of these schools on the certificate of their teachers and will be credited with work completed, provided it is at least equal to the University's minimum requirements as stated on page 15. They will be conditioned on the unfinished portions.

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Announcements

THE Spring Term of the University of North Carolina will begin January 2, 1907.

Registration, January, 2, 3, 1907. Applicants for admission will be examined on the days appointed for registration.

Lectures in the Academic Department and in the Professional Schools will begin January 4, 1907.

Commencement, June 5, 1907.

For the Catalogue or for detailed information, address

FRANCIS P. VENABLE, PRESIDENT

UNIVERSITY OF NORTH CAROLINA

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